

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

**Unification Technologies LLC,**

*Plaintiff,*

v.

**Micron Technology, Inc.; Micron  
Semiconductor Products, Inc.; and  
Micron Technology Texas LLC,**

*Defendants.*

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**Civil Action No. 6:20-cv-500**

**Jury Trial Demanded**

**ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Unification Technologies LLC files this Original Complaint for patent infringement against Micron Technology, Inc., Micron Semiconductor Products, Inc., and Micron Technology Texas LLC, alleging as follows:

**NATURE OF THE SUIT**

1. This is a claim for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code.

**THE PARTIES**

2. Plaintiff **Unification Technologies LLC** (“UTL”) is a Texas Limited Liability Company with its principal place of business at 6136 Frisco Square Boulevard, Suite 400, Frisco, Texas 75034.

3. Defendant **Micron Technology, Inc.** (“**Micron Technology**”) is a Delaware corporation with a principal place of business at 8000 South Federal Way, Boise, Idaho 83716. Micron Technology also has a place of business at 101 West Louis Henna Boulevard, Suite 210,

Austin, Texas 78728. Micron Technology is registered with the Texas Secretary of State to do business in Texas.

4. Defendant **Micron Semiconductor Products, Inc.** (“**Micron Semiconductor**”) is an Idaho corporation with a principal place of business at 8000 South Federal Way, Boise, Idaho 83716. Micron Semiconductor also has a place of business at 101 West Louis Henna Boulevard, Suite 210, Austin, Texas 78728. Micron Semiconductor is registered with the Texas Secretary of State to do business in Texas. Micron Semiconductor can be served through its registered agent, The Corporation Service Company, 211 E. 7th Street, Suite 620, Austin, TX 78701-3218.

5. Defendant **Micron Technology Texas, LLC** (“**Micron Texas**”, collectively “**Micron**”) is an Idaho Limited Liability Company with a principal place of business at 8000 South Federal Way, Boise, Idaho 83716. Micron Texas also has places of business at 101 West Louis Henna Boulevard, Suite 210, Austin, Texas 78728 and 805 Central Expressway South #100, Allen, Texas 75013. Micron Semiconductor can be served through its registered agent, The Corporation Service Company, 211 E. 7th Street, Suite 620, Austin, TX 78701-3218.

6. Micron is one of the largest memory chip makers in the world. It makes dynamic random-access memory (“DRAM”), NAND Flash, and NOR Flash memory, and other Solid-State Drive (“SSD”) and controller products. Micron’s products are offered under the Micron brand as well as private labels. Micron makes its own products in semiconductor fabrication plants in the United States and other countries throughout the world. Micron sells its products to customers, including customers in this District, in the computer, networking and storage, consumer electronics, solid-state drives, and mobile telecommunications markets.

7. Micron maintains offices in Austin and Allen, Texas. Within the United States, Micron also has offices in Folsom, Irvine, Longmont, Milpitas, San Diego, and San Jose,

California; Boise and Meridian, Idaho; Minneapolis, Minnesota; Lehi, Utah; Manassas, Virginia; and Seattle, Washington.<sup>1</sup> Outside the United States, Micron also has offices in China, India, Japan, Korea, Malaysia, Singapore, Taiwan, Belgium, Germany, Israel, Italy, and the United Kingdom.<sup>2</sup>

8. Micron operates semiconductor fabrication plants in Boise, Idaho; Lehi, Utah; and Manassas, Virginia, and fabricates and manufactures SSD products in at least Lehi, Utah and Manassas, Virginia.<sup>3</sup> Outside the United States, Micron operates semiconductor fabrication plants in at least China, Japan, Singapore, and Taiwan.<sup>4</sup>

9. Micron operates and owns the micron.com website, and markets, offers, distributes, and provides technical support for its SSD products throughout the United States including in this District.

10. Micron develops, designs, manufactures, distributes, markets, offers to sell, and/or sells infringing products and services within the United States, including in this District, and otherwise purposefully directs infringing activities to this District in connection with its Austin, Texas office; its micron.com website; and its other places of business in Texas and the rest of the United States.

### **JURISDICTION AND VENUE**

11. This action arises under the patent laws of the United States, 35 U.S.C. § 101, *et seq.* This Court's jurisdiction over this action is proper under the above statutes, including 35

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<sup>1</sup> Ex. 1, <https://www.micron.com/about/locations> (last visited June 3, 2020).

<sup>2</sup> *Id.*

<sup>3</sup> Ex. 2, [https://en.wikipedia.org/wiki/List\\_of\\_semiconductor\\_fabrication\\_plants](https://en.wikipedia.org/wiki/List_of_semiconductor_fabrication_plants) (last visited June 3, 2020).

<sup>4</sup> *Id.*

U.S.C. § 271, *et seq.*, 28 U.S.C. § 1331 (federal question jurisdiction), and § 1338 (jurisdiction over patent actions).

12. This Court has personal jurisdiction over Defendants in accordance with due process and/or the Texas Long Arm Statute because, in part, Defendants “recruit[] Texas residents, directly or through an intermediary located in this state, for employment inside or outside this state.” TEX. CIV. PRAC. & REM. CODE § 17.042(3).

13. This Court has personal jurisdiction over Micron because Micron has engaged, and continues to engage in continuous, systematic, and substantial activities within this State, including the substantial marketing and sales of products within this State and this District. Furthermore, upon information and belief, this Court has personal jurisdiction over Micron because Micron has committed acts giving rise to UTL’s claims for patent infringement within and directed to this District.

14. For example, Micron is subject to personal jurisdiction in this Court because, *inter alia*, it has regular and established places of business in this District, including offices located at 101 West Louis Henna Boulevard, Suite 210, Austin, Texas 78728.<sup>5</sup> The Travis County Central Appraisal District (CAD) website<sup>6</sup> indicates that both Micron Technology and Micron Semiconductor own the property at 101 West Louis Henna Boulevard, Suite 210, Austin, Texas 78664 and that it is appraised at more than \$2 million.<sup>7</sup>

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<sup>5</sup> Ex 3, <https://www.micron.com/about/locations?country=USA&city=Austin> (last visited June 3, 2020).

<sup>6</sup> Ex 4, <http://propaccess.traviscad.org/clientdb/?cid=1> (last visited June 3, 2020).

<sup>7</sup> Ex 5, [http://propaccess.traviscad.org/clientdb/Property.aspx?prop\\_id=874673](http://propaccess.traviscad.org/clientdb/Property.aspx?prop_id=874673) (last visited June 3, 2020) (property record for Micron Technology); Ex 6, [http://propaccess.traviscad.org/clientdb/Property.aspx?prop\\_id=926072](http://propaccess.traviscad.org/clientdb/Property.aspx?prop_id=926072) (last visited June 3, 2020) (property record for Micron Semiconductor).

15. Micron's Austin offices are regular and established places of business at least because these locations include many members of Micron's important teams, including storage system architects, SPME system architects, storage system engineers, storage solutions engineers, and software engineers. Micron posts job openings for its Allen office<sup>8</sup>, and as of June 3, 2020, Micron was posting two job openings for its Allen office and Austin office that were available or recently filled.<sup>9</sup> These and additional job postings can be found on Monster.com and various other websites.<sup>10</sup>

16. Based on publicly available information, since 2016, Micron Technology has been the employer of approximately twenty recipients of H-1B visas who work and reside in the Austin, Texas area.<sup>11</sup> Micron Semiconductor has been the employer of at least two recipients of H-1B visas who work and reside in the Austin, Texas area.<sup>12</sup> Additionally, Micron Technology has been the employer of approximately sixteen recipients of H-1B visas who work and reside in the Allen, Texas area.<sup>13</sup>

17. Micron, directly and through its agents, regularly conducts, solicits, and transacts business in this District and elsewhere in Texas, including through its micron.com website. For

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<sup>8</sup> Ex 7, <https://jobs.micron.com/search/?createNewAlert=false&q=&locationsearch=Texas> (last visited June 3, 2020).

<sup>9</sup> *Id.*

<sup>10</sup> Ex. 8, [https://www.monster.com/jobs/search/?cn=micron&where=texas&intcid=skr\\_navigation\\_nhpso\\_searchCompany](https://www.monster.com/jobs/search/?cn=micron&where=texas&intcid=skr_navigation_nhpso_searchCompany) (last visited June 3, 2020).

<sup>11</sup> Ex. 9, <https://h1bdata.info/index.php?em=Micron+Technology&job=&city=Austin&year=All+Years> (last visited June 3, 2020).

<sup>12</sup> Ex. 10, <https://h1bdata.info/index.php?em=Micron+Semiconductor&job=&city=Austin&year=All+Years> (last visited June 3, 2020).

<sup>13</sup> Ex. 11, <https://h1bdata.info/index.php?em=Micron+Technology&job=&city=Allen&year=All+Years> (last visited June 3, 2020).

example, Micron employs sales and marketing employees that regularly sell, offer to sell, or otherwise distribute SSD products in this District and elsewhere in Texas.

18. In particular, Micron has committed and continues to commit acts of infringement in violation of 35 U.S.C. § 271, and has made, used, marketed, distributed, offered for sale, and sold infringing products in Texas, including in this District, and engaged in infringing conduct within and directed at or from this District. The infringing SSD products have been and continue to be distributed to and used in this District. Micron's acts cause injury to UTL, including injury suffered within this District.

19. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b) because a substantial part of the events or omissions giving rise to the claims occurred in this District, and because Micron has committed acts of infringement in this District and has a regular and established place of business in this District.

20. Specifically, Micron Technology, Micron Semiconductor, and Micron Texas have regular and established places of business located at 101 West Louis Henna, Boulevard, Suite 210, Austin, Texas 78728. Furthermore, Micron Technology, Micron Semiconductor, and Micron Texas are all registered to do business in Texas.

21. Micron Semiconductor and Micron Texas are wholly owned subsidiaries of Micron Technology. Micron Technology does not separately report revenue from Micron Semiconductor or Micron Texas in its filings to the Securities and Exchange Commission (SEC), but rather reports combined revenue from its various products and subsidiaries.

22. On information and belief, Micron Technology owns and operates Micron Semiconductor and Micron Texas, including the cooperative development, improvement, and support of Micron's products and services.

**THE PATENTS-IN-SUIT**

23. This cause of action asserts infringement of United States Patent Nos. 8,762,658 (“the ’658 Patent”); 8,533,406 (“the ’406 Patent”); and 9,632,727 (“the ’727 Patent”) (collectively, the “Patents-in-Suit”).

24. The inventions disclosed in the Patents-in-Suit are a valuable contribution to the SSD product industry. In fact, several major SSD market competitors have already taken licenses to the Patents-in-Suit, including Intel Corp., Google, LLC, Samsung Electronics America, Inc., SK Hynix, Inc., Western Digital, Inc., Toshiba America, Inc. and e.Digital Corp.

25. The ’658 Patent, entitled “Systems and Methods For Persistent Deallocation,” duly and legally issued on June 24, 2014, from U.S. Patent Application No. 13/566,471, filed on August 3, 2012, naming David Flynn, Jonathan Thatcher, and Michael Zappe as the inventors. A true and correct copy of the ’658 Patent is attached hereto as **Exhibit 12** and is incorporated by reference.

26. The ’658 Patent is a continuation of U.S. Patent No. 8,261,005.

27. The ’658 Patent claims patent-eligible subject matter under 35 U.S.C. § 101.

28. Plaintiff UTL is the owner and assignee of all rights, title, and interest in and under the ’658 Patent.

29. Assignments of the ’658 Patent reflective of its chain-of-title are recorded at the USPTO at Reel 028800, Frame 0340; Reel 028802 Frame 0131; Reel 033389 Frame 0511; Reel 033419 Frame 0748; Reel 033410 Frame 0158; Reel 038362 Frame 0604; Reel 038362 Frame 0575; Reel 038748 Frame 0880; Reel 047702 Frame 0413; Reel 048918 Frame 0035; Reel 052095 Frame 0903; and Reel 052096 Frame 0225.

30. UTL has standing to sue for infringement of the ’658 Patent.

31. The '406 Patent, entitled "Apparatus, System, and Method For Identifying Data That Is No Longer In Use," duly and legally issued on September 10, 2013, from U.S. Patent Application No. 13/607,486, filed on September 7, 2012, naming David Flynn, Jonathan Thatcher, and Michael Zappe as the inventors. A true and correct copy of the '406 Patent is attached hereto as **Exhibit 13** and is incorporated by reference.

32. The '406 Patent is a continuation of the '658 Patent.

33. The '406 Patent claims patent-eligible subject matter under 35 U.S.C. § 101.

34. Plaintiff UTL is the owner and assignee of all rights, title, and interest in and under the '406 Patent.

35. Assignments of the '406 Patent reflective of its chain-of-title are recorded at the USPTO at Reel 029015, Frame 0181; Reel 029033 Frame 0133; Reel 033389 Frame 0511; Reel 033419 Frame 0748; Reel 033410 Frame 0158; Reel 038362 Frame 0604; Reel 038362 Frame 0575; Reel 038748 Frame 0880; Reel 047702 Frame 0413; Reel 048918 Frame 0035; Reel 052095 Frame 0903; and Reel 052096 Frame 0225.

36. UTL has standing to sue for infringement of the '406 Patent.

37. The '727 Patent, entitled "Systems and Methods For Identifying Storage Resources That Are Not In Use," duly and legally issued on April 25, 2017, from U.S. Patent Application No. 14/309,751, filed on June 19, 2014, naming David Flynn, Jonathan Thatcher, and Michael Zappe as the inventors. A true and correct copy of the '727 Patent is attached hereto as **Exhibit 14** and is incorporated by reference.

38. The '727 Patent is a continuation of the '658 Patent.

39. The '727 Patent claims patent-eligible subject matter under 35 U.S.C. § 101.



40. Plaintiff UTL is the owner and assignee of all rights, title, and interest in and under the '727 Patent.

41. Assignments of the '727 Patent reflective of its chain-of-title are recorded at the USPTO at Reel 033389 Frame 0511; Reel 033419 Frame 0748; Reel 033410 Frame 0158; Reel 038362 Frame 0604; Reel 038362 Frame 0575; Reel 038748 Frame 0880; Reel 047702 Frame 0413; Reel 048918 Frame 0035; Reel 052095 Frame 0903; and Reel 052096 Frame 0225.

42. UTL has standing to sue for infringement of the '727 Patent.

43. Micron has not obtained a license to any of the Patents-in-Suit.

44. Micron does not have UTL's permission to make, use, sell, offer to sell, or import products that are covered by one or more claims of any of the Patents-in-Suit.

45. Micron requires a license to the Patents-in-Suit and otherwise needs to cease its ongoing infringement of UTL's patent rights.

#### **GENERAL ALLEGATIONS**

46. Upon information and belief, Micron makes, uses, sells, offers to sell, and/or imports into the United States many types of SSD devices as claimed in each of the Patents-in-Suit. For example, Defendants make, use, sell, offer to sell, and/or import into the United States the Micron 5200 Series SATA NAND Flash SSD.

47. Micron has infringed and continues to infringe (literally and/or under the doctrine of equivalents), directly, indirectly, and/or through subsidiaries, agents, representatives, or intermediaries, one or more claims of each of the Patents-in-Suit by making, using, importing, testing, supplying, causing to be supplied, selling, and/or offering for sale in the United States Micron's SSD products.

48. Micron has knowledge of the Patents-in-Suit at least as of the filing of this lawsuit.

49. Further discovery may reveal earlier knowledge of one or more of the Patents-in-Suit, which would provide additional evidence of Micron's specific intent and/or willful blindness with respect to infringement.

50. UTL has been and continues to be damaged because of Micron's infringing conduct. Micron is therefore liable to UTL in an amount that adequately compensates UTL for Micron's infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

51. Micron markets and sells other products that are not covered by the claims of the Patents-in-Suit but that are sold with or in conjunction with Micron's SSD products. Accordingly, UTL is entitled to collect damages from Micron for convoyed sales of certain non-patented items.

52. Defendants failed to obtain permission from UTL to make, use, sell, offer to sell, or import products incorporating the inventions claimed in the Patents-in-Suit.

53. Attached to this Complaint are **Exhibits 15-17**, which are sample claim charts and are incorporated by reference herein.

54. For each count of infringement listed below, UTL incorporates and re-states the allegations contained in the preceding paragraphs above including these General Allegations as if fully set forth in each count of infringement.

#### **COUNT I – INFRINGEMENT OF THE '658 PATENT**

55. UTL incorporates herein the allegations made in paragraphs 1–54.

56. Micron has been and is now directly infringing the '658 Patent in violation of 35 U.S.C. § 271(a) by making, using, selling, offering for sale, and/or importing into the United States products that are covered by at least Claim 1 of the '658 Patent.

57. Micron makes, has made, uses, sells, offers to sell, and/or imports Micron SSD products that contain a non-volatile storage medium such as Flash memory, a flash translation layer as well as circuitry and associated software that stores data in response to receiving certain commands such as the TRIM command such that data is stored in response to said command indicating that certain data is erased. These products infringe at least Claim 1 of the '658 Patent.

58. For example, Micron makes, has made, uses, sells, offers to sell, and/or imports the Micron 5200 Series SSD. The Micron 5200 Series SSD contains NAND Flash memory, a flash translation layer, and circuitry and associated software that stores data in response to receiving a TRIM command such that data is stored in response to said command indicating that certain data is erased. The Micron 5200 Series SSD infringes at least Claim 1 of the '658 Patent.

59. An exemplary claim chart comparing Micron's infringing Micron 5200 Series SSDs to Claim 1 of the '658 Patent is attached as **Exhibit 15** and incorporated herein by reference. This is only a non-limiting example. Many of Micron's other SSD products that utilize the same or similar Flash memory, flash translation table, and circuitry and associated software that store data in response to receiving a command such as the TRIM command such that data is stored in response to said command indicating that certain data is erased, also infringe at least claim 1 of the '658 Patent.

60. Micron has actual knowledge of the '658 Patent at least since the filing of this lawsuit.

61. As a result of Micron's infringement of the '658 Patent, UTL has suffered and is owed monetary damages that are adequate to compensate it for the infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

**COUNT II – INFRINGEMENT OF THE '406 PATENT**

62. UTL incorporates herein the allegations made in paragraphs 1–61.

63. Micron has been and is now directly infringing the '406 Patent in violation of 35 U.S.C. § 271(a) by making, using, selling, offering for sale, and/or importing into the United States products that are covered by at least Claim 15 of the '406 Patent.

64. Micron makes, has made, uses, sells, offers to sell, and/or imports Micron SSD products that include a request receiver module configured to receive information that data has been deleted, and a marking module to record that data can then be erased. These products infringe at least Claim 15 of the '406 Patent.

65. Many of Micron's SSD products – that utilize Flash memory, a flash translation layer that maps one or more logical block addresses ("LBAs") to physical addresses for certain data, and contains circuitry that is configured to receive a TRIM command that indicates and records that data stored in the 3D TLC NAND Flash memory at the locations specified by the LBAs indicated in a TRIM command has been deleted and can be erased – infringe at least Claim 15 of the '406 Patent.

66. For example, Micron makes, has made, uses, sells, offers to sell, and/or imports the Micron 5200 Series SSD. The Micron 5200 Series SSD is an apparatus utilizes NAND Flash memory, a flash translation layer that maps one or more LBAs to physical addresses for certain data, and contains circuitry that is configured to receive a TRIM command. The Micron 5200 Series SSD then indicates and records that data stored in the NAND Flash memory at the locations specified by the LBAs indicated in a TRIM command has been deleted and can be erased. The Micron 5200 Series SSD infringes at least Claim 15 of the '406 Patent.

67. An exemplary claim chart comparing Micron's infringing Micron 5200 Series SSDs to Claim 15 of the '406 Patent is attached as **Exhibit 16** and incorporated herein by reference.

This is only a non-limiting example. Many of Micron's other SSD products that utilize the same or similar Flash memory, flash translation layer, and circuitry configured to receive a TRIM command also infringe at least Claim 15 of the '406 Patent.

68. Micron has actual knowledge of the '406 Patent at least since the filing of this lawsuit.

69. As a result of Micron's infringement of the '406 Patent, UTL has suffered and is owed monetary damages that are adequate to compensate it for the infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

### **COUNT III – INFRINGEMENT OF THE '727 PATENT**

70. UTL incorporates herein the allegations made in paragraphs 1–69.

71. Micron has been and is now directly infringing the '727 Patent in violation of 35 U.S.C. § 271(a) by making, using, selling, offering for sale, and/or importing into the United States products that are covered by at least Claim 1 of the '727 Patent.

72. Micron makes, has made, uses, sells, offers to sell, and/or imports SSD products that include solid-state storage memory such as NAND Flash memory along with a controller, a flash translation layer, and circuitry and associated software that assigns logical addresses to physical addresses used to store data on the solid-state storage memory and also removes those assignments in response to commands such as TRIM from the operating system. These products infringe at least Claim 1 of the '727 Patent.

73. For example, Micron makes, has made, uses, sells, offers to sell, and/or imports the Micron 5200 Series SATA SSDs. These SSDs include solid-state storage memory such as NAND Flash memory along with a controller, a flash translation layer, and circuitry and associated software that assigns logical addresses to physical addresses used to store data on the solid-state

storage memory and also removes those assignments in response to commands such as TRIM from the operating system. These Micron SSD products infringe at least Claim 1 of the '727 Patent.

74. An exemplary claim chart comparing Micron's infringing Micron 5200 Series SSD to Claim 1 of the '727 Patent is attached as **Exhibit 17** and incorporated herein by reference. This is only a non-limiting example. Many of Micron's other SSD products that incorporate Flash memory with a controller, a flash translation layer, and circuitry and associated software that assigns logical addresses to physical addresses used to store data and also removes those assignments in response to certain commands such as the TRIM command also infringe at least Claim 1 of the '727 Patent.

75. Micron has actual knowledge of the '727 Patent at least since the filing of this lawsuit.

76. As a result of Micron's infringement of the '727 Patent, UTL has suffered and is owed monetary damages that are adequate to compensate it for the infringement under 35 U.S.C. § 284, but in no event less than a reasonable royalty.

#### **DEMAND FOR A JURY TRIAL**

77. Pursuant to Rule 38 of the Federal Rules of Civil Procedure, UTL demands a trial by jury on all issues triable of right by a jury.

#### **PRAYER FOR RELIEF**

78. UTL respectfully requests that this Court enter judgment in its favor and grant the following relief:

- (i) Judgment that Micron has directly and/or indirectly infringed one or more claims of each of the Patents-in-Suit;

- (ii) Judgment and Order that Micron must to pay UTL past and future damages under 35 U.S.C. § 284, including supplemental damages arising from any continuing post-verdict infringement for the time between trial and entry of the final judgment, together with an accounting, as needed, as provided under 35 U.S.C. § 284;
- (iii) Judgment and Order that Micron must pay UTL reasonable ongoing royalties on a go-forward basis after final judgment;
- (iv) Judgment and Order that Micron must pay UTL pre-judgment and post-judgment interest on the damages award;
- (v) Judgment and Order that Micron must pay UTL's costs; and
- (vi) Such other and further relief as the Court may deem just and proper.

Dated: June 5, 2020

Respectfully submitted,

/s/ Edward Nelson III

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